

AG 2100 Quick Start

Introduction

This document provides instructions for getting started with the Nomadix Wireless Access Gateway 2100 (AG 2100) product. If you have any problems, please contact our technical support team at +1.818.575.2590, or email: support@nomadix.com.

The AG 2100 has three network interface configuration modes:

- 1) Static
- 2) DHCP Client
- 3) PPPoE Client

By default, the 'DHCP Client' configuration mode is enabled.

There are two ways to configure the Nomadix Wireless Access Gateways:

- 1) Network side as shown in Figure 1.
- 2) Subscriber side as shown in Figure 2.

By default, only the SSH interface is available on the subscriber-side. All interfaces are available on the network-side.

Requirement Checklist

You will need the following items to configure the AG 2100

- Laptop or PC
- Hub
- Three (3) Ethernet cables
- Wireless card (optional)
- SSH client

Start Here

1. Unpack the Access Gateway and place it on a flat and stable work surface.
2. Select the side on which to access the management interface of the NSE gateway.

AG 2100 Quick Start (cont'd)

- a. To configure the Access Gateway from the network-side, setup a configuration network as shown in Figure 1 below.

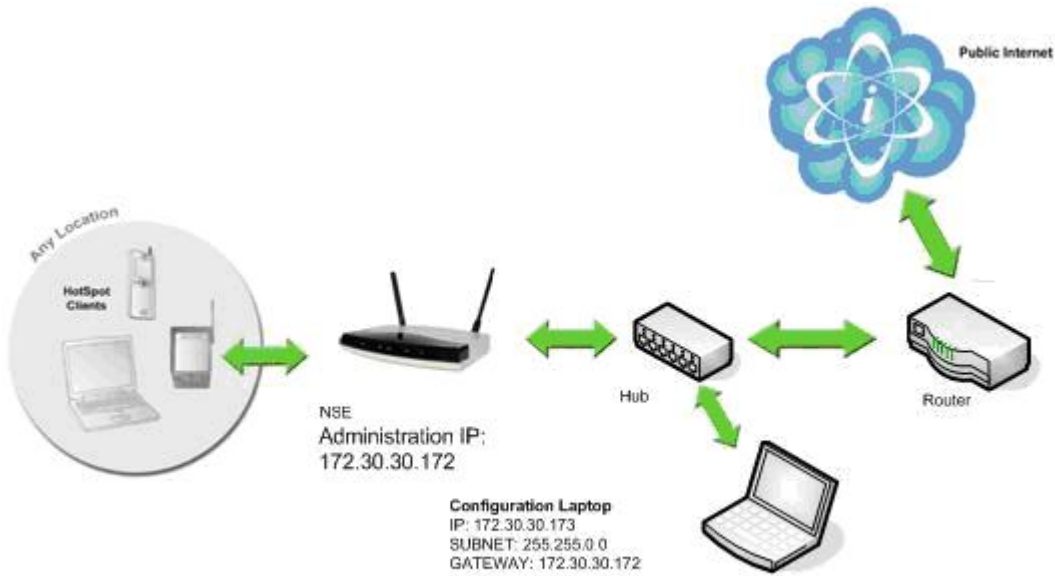


Figure 1: Configuration network set-up

- b. To configure the Access Gateway from the subscriber-side, setup a configuration network as shown in Figure 2 below.

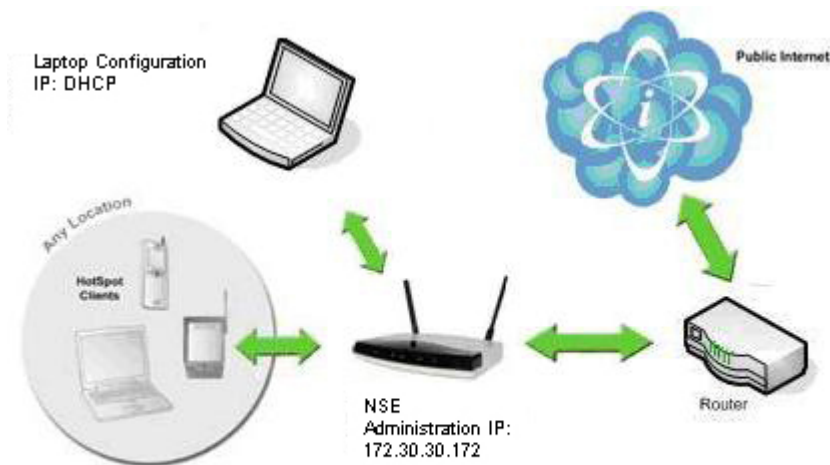


Figure 2: Configuration from subscriber-side setup-up

AG 2100 Quick Start (cont'd)

Note: The AG 2100 must be connected to a live network that can access the Internet or it will not be able to receive the License Key from Nomadix as explained in step 3 below.

3. Connect the power cord to turn on the AG 2100. You can also use PoE to power the AG 2100
4. Configure the Laptop with the following parameters:
 - a. For network side configuration of NSE:
IP: 172.30.30.173
Subnet: 255.255.0.0
Gateway: 172.30.30.172
 - b. For subscriber side configuration of NSE:
Any IP address configuration is acceptable.
Wireless Configuration:
SSID: Nomadix
Security: Open
5. Wait for the AG 2100 to finish initializing (which is when the power light starts blinking) and start a Telnet session to communicate with the AG 2100 using the default management IP address: 172.30.30.172

Note: The AG 2100 may take up to 5 minutes to power up for the first time as it looks for DHCP server
6. Log in to the Command Line interface:

*Note: The default for both the Username and Password is **admin**.*
7. Go to the “Configuration” section on the next page and configure the AG 2100 for your network.

AG 2100 Quick Start (cont'd)

Configuration

Step 1: Configuring IP and DNS information

Static IP Configuration

For AG 2100 with Static IP address, enter IP address and DNS information as shown in steps 1a and 1b.

In case of AG 2100 configured with DHCP Client, skip to **Step 2: Entering location information**, since the AG 2100 has already received the IP and DNS settings from the DHCP server.

Step 1a: Entering your static IP Address Information

IP Address	Your Settings	Examples
Network IP Address		192.168.1.10
Subnet Mask		255.255.255.0
Default Gateway		192.168.1.254

Step 1b: Entering your DNS Information

DNS Parameter	Your Settings	Examples
Domain Name		nomadix.com
Host Name (<i>no spaces</i>)		nse
Primary DNS Server (<i>mandatory</i>)		198.6.1.1
Secondary DNS Server (<i>optional</i>)		0.0.0.0
Tertiary DNS Server (<i>optional</i>)		0.0.0.0

You will be asked to reboot after you enter the DNS information. Please enter (y)es when prompted to reboot.

AG 2100 Quick Start (cont'd)

Sample Screen Responses

IP and DNS Parameters

```

Login: admin
Password: *****

NO LICENSE KEY HAS BEEN ENTERED. A LICENSE KEY MUST BE ENTERED
IN ORDER TO PROCEED WITH INSTALLATION.
SEE USER'S GUIDE FOR LICENSE KEY INFORMATION.

INSTALLATION WILL NOW TRY TO CONTACT THE NOMADIX LICENSE KEY SERVER.
IN ORDER TO PROCEED, THE NSE MUST BE ABLE TO CONNECT TO THE INTERNET.

DO YOU WANT TO CONFIGURE THE NSE'S IP AND DNS SETTINGS? [yes/no]: y

Select the Network Interface Configuration Mode:

0 - Static
1 - DHCP Client
2 - PPPoE Client

Select the Network Interface Configuration Mode      [0]: 0

Enter network interface IP          [10.0.0.10   ]: 192.168.1.10
Enter subnet mask                    [255.255.255.0 ]:
Enter default gateway IP            [10.0.0.1    ]: 192.168.1.254

NOTE: IF DHCP Client or PPPoE Client is enabled, the Primary and
Secondary DNS Server may not be configured, since the DHCP/PPPoE server
may provide those items. Furthermore, if DHCP Client is configured, the
Domain may not be configured.

Enter domain                         [nomadix2.com ]:
Enter host name (no spaces)          [ag2100     ]:
Enter primary DNS                     [0.0.0.1    ]: 198.6.1.1
Enter secondary DNS                   [0.0.0.0    ]: 0.0.0.0
Enter tertiary DNS                    [198.6.1.2   ]:

The system must be rebooted to function properly.
Reboot? [yes/no]: █

```

PPPoE Client Configuration

For AG 2100 with network configuration set to PPPoE client, enter DNS information as shown in step 1a and PPPoE client configuration information as shown in step 1b.

Please note that in case of PPPoE client, only the tertiary DNS server is configurable. It is assumed that the Primary and Secondary DNS servers are provided by the PPPoE server.

AG 2100 Quick Start (cont'd)

Step 1a: Entering your DNS Information

DNS Parameter	Your Settings	Examples
Domain Name		nomadix.com
Host Name (<i>no spaces</i>)		nse
Primary DNS Server (<i>not configurable</i>)		
Secondary DNS Server (<i>not configurable</i>)		
Tertiary DNS Server (<i>optional</i>)		198.6.1.2

Step 1b: Entering your PPPoE Information

PPPoE Parameter	Your Settings	Examples
PPPoE Service Name		NSE
Echo Request Interval		30
Maximum non-responses		6
Authentication Username		Test
Authentication Password		Test

Select the PPP IP address configuration mode. If you select Dynamic, the IP address will be automatically assigned by the PPP server. If you select Static, please enter the IP address.

TCP maximum MSS		1452
-----------------	--	------

AG 2100 Quick Start (cont'd)

Sample Screen Responses

DNS Parameters and PPPoE Configuration

```

Select the Network Interface Configuration Mode:

0 - Static
1 - DHCP Client
2 - PPPoE Client

Select the Network Interface Configuration Mode      [0]: 2

NOTE: If DHCP Client or PPPoE Client is enabled, the Primary and
Secondary DNS Server may not be configured, since the DHCP/PPPoE server
may provide those items. Furthermore, if DHCP Client is configured, the
Domain may not be configured.

Domain                nomadix2.com
Host Name              ag2100
Primary DNS            198.6.1.1
Secondary DNS          0.0.0.0
Tertiary DNS           198.6.1.2

Enter domain           [nomadix2.com   ]:
Enter host name (no spaces) [ag2100       ]:
Enter tertiary DNS      [198.6.1.2    ]:
PPPoE Service Name (or "none") [ag2100       ]:
PPP echo-request interval [30           ]:
PPP maximum non-responses [6            ]:
PPP authentication Username (or "none") [1024        ]:
PPP authentication Password (or "none") [1024        ]:

Select the PPP IP address Configuration Mode:

0 - Dynamic
1 - Static

Select the PPP IP address Configuration Mode      [0]           ]:
TCP maximum MSS [1452          ]:

PPPoE Service Name          ag2100
PPP Keep-Alive:
  Echo-Request Interval     30
  Maximum Non-responses     6
PPP Authentication:
  User Name                 1024
  Password                  1024
IP Configuration Mode      Dynamic
Static IP Address           0.0.0.0
Maximum TCP MSS            1452

The system must be rebooted to function properly.
Reboot? [yes/no]:

```

You will be asked to reboot after you enter this information. Please enter (y)es when prompted to reboot.

AG 2100 Quick Start (cont'd)

Step 2: Entering Your Location Information

When the system powers up, you will be asked to input location information.

Location Information	Your Settings	Examples
Company Name (<i>mandatory</i>)		Nomadix, Inc.
Site Name (<i>mandatory</i>)		Headquarters
Address (<i>2 lines</i>)		1100 Business Center
City (<i>mandatory</i>)		Newbury Park
State (<i>mandatory</i>)		California
Zip		91330
Country (<i>mandatory</i>)		USA
Email Address (<i>mandatory</i>)		nomad@nomadix.com
Venue Type (<i>mandatory</i>)		Corporate Guest Access
ISO Country Code		US
Phone Country Code		1
Calling Area Code		818
Network SSID/ZONE		SSID1

Step 3: Retrieving Your License Key

When the IP Addresses, DNS and Location information are configured, the system will prompt you to accept or decline the terms of the End User License Agreement (EULA). You must accept the terms of the EULA before the AG 2100 can retrieve its License Key.

To retrieve the License Key, enter **[yes]** at the prompt.

The AG 2100 will retrieve the License Key from the Nomadix License Key Server and reboot.

Step 4: Configuring AG 2100 DHCP Server settings

DHCP Server is enabled by default. To configure the DHCP Server, go to DHCP under the Configuration menu. You can either modify the default DHCP pool or delete/add another DHCP pool.

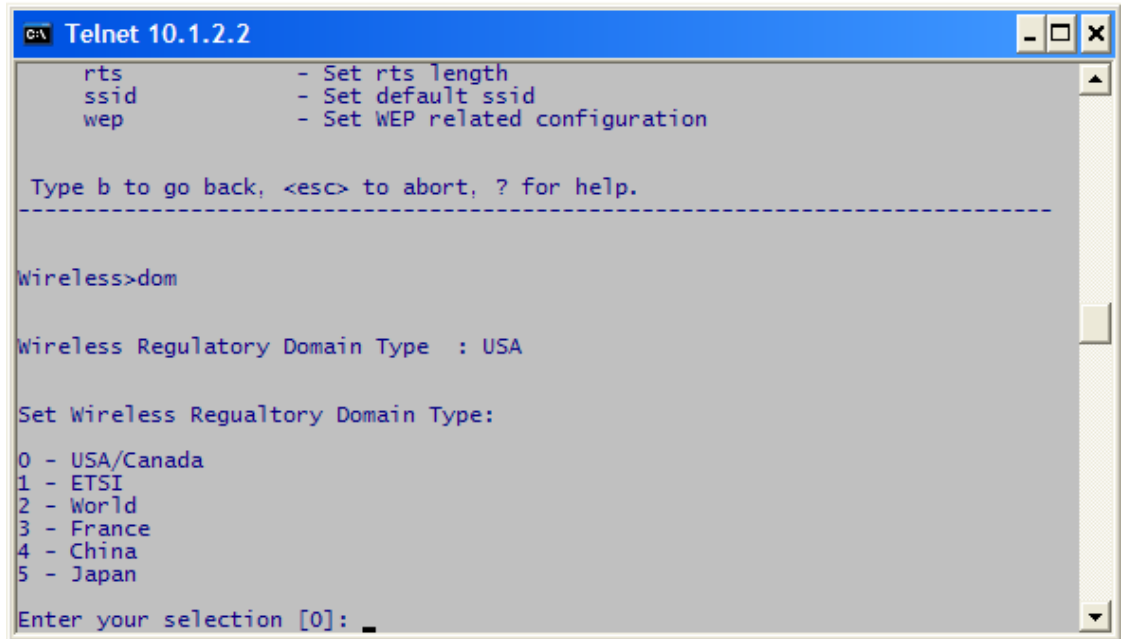
AG 2100 Quick Start (cont'd)

DHCP Parameter	Your Settings	Examples
DHCP Services (<i>Disable</i>)		no
DHCP Relay (<i>Yes / No</i>) <i>If No, skip to DHCP Server</i>		no
DHCP Relay Server IP Address		blank
DHCP Relay Agent IP Address		Blank
DHCP Server (<i>Yes / No</i>) <i>Only if the DHCP Relay is disabled</i>		yes
DHCP Server IP Address		10. 0. 0.4
DHCP Server Subnet Mask		255.255.255.0
DHCP Pool Start IP Address		10.0.0.12
DHCP Pool End IP Address		10.0.0.72
DHCP Lease Minutes		1440

Step 5: Configuring the Regulatory Domain

Base on your country's radio frequency laws, set the wireless regulatory domain type to the appropriate setting. Telnet into the AG 2100 and go to System->Wireless->domain to change the default setting.

AG 2100 Quick Start (cont'd)



```
C:\> Telnet 10.1.2.2

rts          - Set rts length
ssid        - Set default ssid
wep         - Set WEP related configuration

Type b to go back, <esc> to abort, ? for help.
-----

Wireless>dom

Wireless Regulatory Domain Type : USA

Set Wireless Regualtory Domain Type:
0 - USA/Canada
1 - ETSI
2 - World
3 - France
4 - China
5 - Japan
Enter your selection [0]:
```

Step 6: Additional configuration of the System using WMI

You can log in to the AG 2100 and use the graphical Web Management Interface (WMI) (http://nse_ip) to configure the product's features.

You have now established a basic configuration for the AG 2100.